

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
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L42	0	copy adj configuration adj instruction	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/12 16:08
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Theodore Marescaux, Andrei Bartic, Dideriek Verkest, Serge Vernalde, Rudy Lauwereins

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**Abstract:** Multimedia support appears on embedded platforms, such as WAP for mobile phones. However, true multimedia applications require both the computation power that only dedicated hardware can provide and the flexibility of software implementations. To this end, we are investigating reconfigurable architectures, composed of an instruction-set processor running software processes and coupled to an FPGA on which hardware tasks are spawned by dynamic partial reconfiguration. This paper focuses on two... ([Update](#))

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.... in decoupling and composing local solutions can be observed in hierarchical lay out and wiring, local clocking strategies such as GALS (globally asynchronous, locally synchronous) 6] software programmable fixed IPs or tiles [7, 8] and synthesisable tiles for dedicated silicon [9] or FPGAs [10, 11]. At the task level, these scalable system architectures (including e.g. chip multiprocessing [12, 13, 14] use tasks with local, independent address spaces and time frames that are composed by means of timingindependent fifo channels (for example, Kahn process networks for streambased ....

....switching to implement inter IP communication is expensive. A first optimisation is to use coarser circuits [47] to reduce the cost. A packet switched interconnect with a predefined set of services allows sharing of communication resources, just like for ASICs, and enables dynamic reconfiguration [10, 11]. The NOC can be synthesised [10] but a preplaced hard wired NOC is the next logical step. New SOC architectures that rely on NOCs include chip multiprocessing [12, 13, 14, 7, 8, 48] to interconnect the homogeneous or heterogeneous tiles, and network processors [49] 6. **Conclusions** We observe ....

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[Infrastructure for Design and Management of.. - Mignolet, Nollt.. \(2003\) \(2 citations\) Self-citation \(Verkest Vernalde Lauwereins\) \(Correct\)](#)

....network plays an important role in our infrastructure, since it supports the communication of the system. **Networks on chip provide a solution for handling communication in complex systems on chip (SoC) We are studying packet switched interconnection networks for reconfigurable platforms [2].** To assist this research, we develop soft interconnection networks on commercial reconfigurable hardware. **They** are qualified soft because they are implemented using the reconfigurable fabric, while future platforms will use fixed networks implemented using standard ASIC technology. **This** soft ....

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 Year of Publication: 2002  
 ISBN:3-540-44108-5

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